

Provide raised ventilation facility at abutment to ensure cross ventilation of roof void.

Wall plate to main rear wall supporting the flat roof is to be fixed with a minimum of M12 bolts at max. 600mm centres
Wall plate straps are to be provided at max. 20m centres

Where new roof abutts existing masonry wall provide code 5 lead at vertical intersection to upstand a minimum of 150mm and to be chased into wall for a minimum of 25mm and cement sealed over.

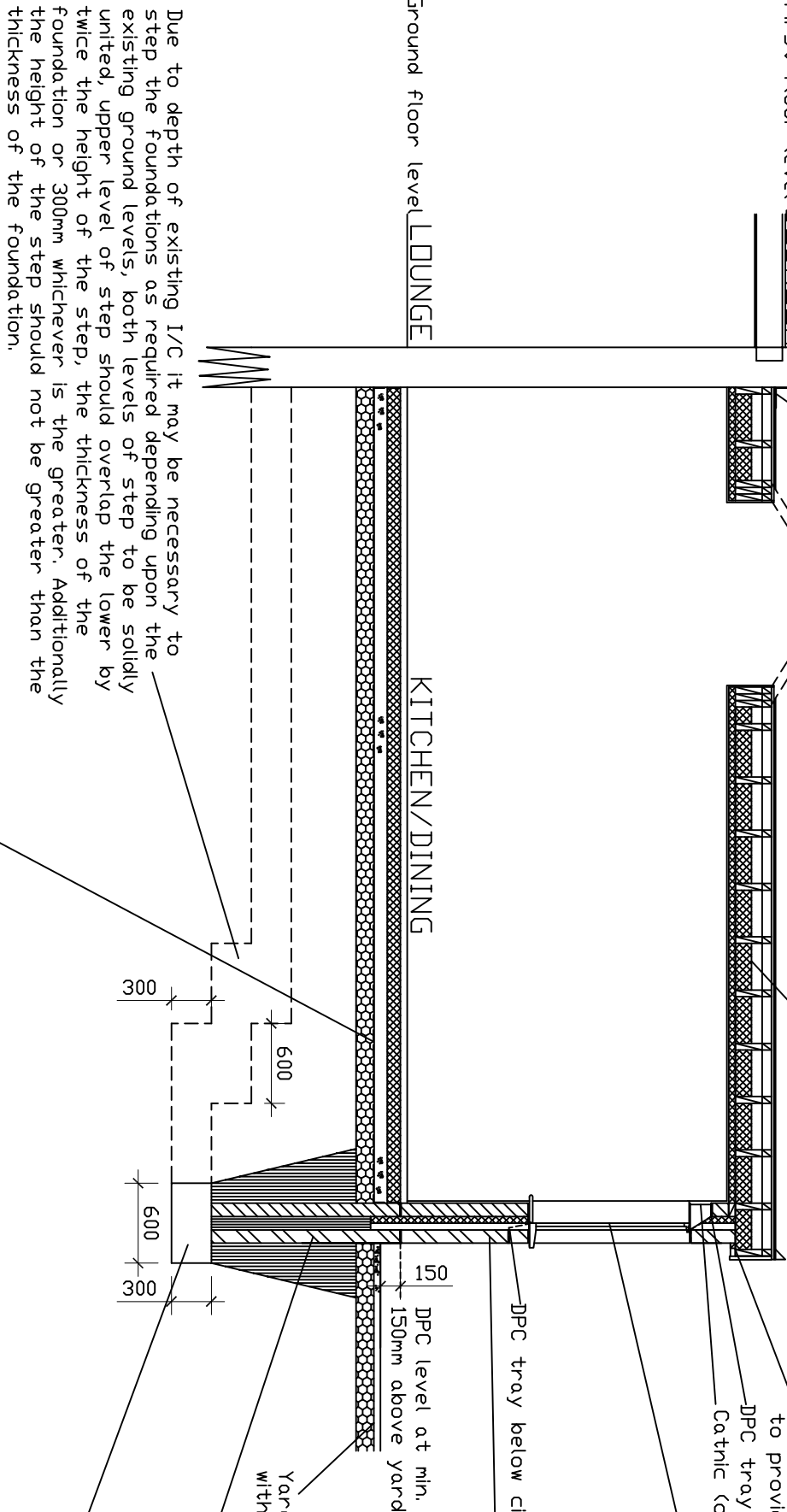
Roof lantern fitted to manufacturers instructions and to include all necessary trimming and flashings as required to provide a watertight seal

Fibreglass or other proprietary roof water-proofing system complete with triangular tilting fillets around perimeter. 1955x47 C16 roof joists at maximum of 400mm centres. Roof insulation to comprise 120mm Celotex XR4000 between joists and 50mm Celotex GA4000 under joists
Provide continuous vermin proof opening at eaves for cross ventilation to roof void with 50mm gap between underside of 20mm exterior grade plywood upper facing on firring pieces and top of insulation for free flow of air. Install visqueen vapour barrier to underside of insulation and 15mm foil backed plasterboard ceiling with taped joints and 5mm plaster skim finish
Roof to achieve a min. U value of 0.15 with a design fall of 1 in 40 and a minimum achieved fall of 1 in 80
Wallplate to main wall supporting the roof to be fixed with a min. of M12 bolts at max. 600 c.c. and wall plate straps are to be max. 20m centres
Joists to be tripled around roof lantern

First floor level
BEDROOM

Ground floor level
LOUNGE

KITCHEN/DINING



Continuous 25mm vermin proof gap at eaves to provide cross ventilation to roof void
DPC tray above lintols
Cathnic (or similar) CG 110/100 lintol over with min. 150mm end-bearing

All new windows to be upvc double glazed with a 20mm air gap and low E glazing. Cavity to be closed at cill level with an insulation block to prevent thermal bridging. Provide Cathnic or similar insulated steel lintols over openings with 150mm end-bearing and cavity tray over. Provide lead core or similar insulated dpc around all external openings. New windows to meet 16 W/m²K U value and horizontal and vertical dpc to be provided to all cavity closures such as eaves, cills and reveals throughout the construction.

New cavity wall to proposed extension to comprise 100mm external skin of face brickwork/rendered blockwork, 125mm cavity with flexible stainless steel wall ties spaced at 750mm horizontal & 450mm vertical to BS1243. 75mm PIR insulation board to cavity to leave 50mm clear to external skin 100mm Thermalite Turbo block internal with 9.5mm plasterboard on 15mm plaster dabs cavity & 3mm skim. Wall to achieve min. U value of 0.21. Cathnic CG110/100 lintols over openings with min. 150mm end-bearing & 225mm long cavity wall ties. Cavity to be sealed at eaves with non-combustible cavity barrier such as 6mm masterboard or gypsum based boards of minimum 12mm thickness.

Yard to comprise 75mm concrete on min. 75mm hardcore with falls away from building to a suitable outlet

Below ground cavity walls to be formed with dense concrete blockwork 7N/mm² 20kg with thickness to match walls above. Provide a minimum of 3 courses of facing brickwork from dpc level down to below existing ground level, all bed in (1:3) sand and cement mortar. Wall ties as described in external walls Cavity filled with weak mix of concrete to within 225mm of dpc level

600x300mm foundations taken down to suitable depth & approved on site by L.A. Inspector. Should any sewer pass under building/through cavity wall then pipe to be protected by 2no. pre-cast conc. lintols bridging each skin of wall and where pipe runs under building then it should be surrounded by 150mm granular material. Where drainage pipes pass through the below ground wall construction, then the opening will be masked with a rigid sheet material.

The foundations indicated are based on the assumption that ground conditions on site are good. If necessary the foundations are to be designed & detailed by a structural engineer appointed by the client.

Foundations designed in accordance with BS8004 2015 / BS EN8103-1: 2011 Code of Practice for Foundations

Profile of foundations as indicated in sections, generally 600x300mm mass concrete grade C25/20 – 20N/mm minimum strength, 20mm nominal coarse aggregate to CP 2004 Foundations taken down to firm natural soils with minimum safe allowable Excavation for foundations to be taken down to a minimum of 760mm below existing ground level to the satisfaction of L. A. building control officer

50mm sand/cement self leveling screed on a 500 gauge vapour controlled layer/membrane draped over the 100mm PIR insulation board or similar approved to achieve a U value of 0.18W/m²K and turned up under dpc at wall abutments. Joints to be taped between insulation boards. Insulation to be laid on 100mm mass concrete floor slab (1:3:6) mix C30 N/mm². with a separating layer of minimum of 500 gauge polythene between. 20mm nominal coarse aggregate on 1200 gauge Visqueen dpm and Radon protection. Membrane to BS8215:1991. Dpm to lap with new cavity tray fitted at dpc level throughout new building works.
All joints to be lapped, folded and taped on 50mm sand blinding on minimum of 150mm compacted/consolidated hardcore. Where site levels require hardcore depths in excess of 150mm then it is to be laid and compacted in a maximum of 225mm layers.

SECTION A.A.

CONSTRUCTION DETAIL

PROJECT

PROPOSED IMPROVEMENTS/ALTERATIONS
62, CLARE STREET,
MERTHYR TYDFIL.

DRAWING CONSTRUCTION DETAIL

SCALE 1:50 DATE NOVEMBER 2021
DRAWN RE DRG.NO. 4